WHAT IS CLAIMED IS:

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1. An apparatus for positioning within a passage communicating with an opening into a body lumen, comprising:

an elongate member comprising proximal and distal ends;

a closure element associated with the elongate member for closing the opening;

a locator member coupled to the elongate member, the locator member having a distal portion extending distally beyond the distal end of the elongate member; and

one or more positioning elements on the distal portion of the locator member, the positioning elements being selectively expandable between a substantially axial collapsed configuration and a substantially transverse expanded configuration.

2. The apparatus of claim 1, wherein the positioning elements comprise splines configured for expanding substantially transversely with respect to a longitudinal axis of the elongate member.

3. The apparatus of claim 2, wherein the one or more positioning elements comprise a plurality of substantially flexible splines.

4. The apparatus of claim 2, wherein the one or more positioning elements comprise a pair of splines disposed opposite one another about the distal portion.

5. The apparatus of claim 2, wherein each spline has a first fixed end and a second movable end, the second end being axially movable towards the first end to cause an intermediate region of the spline to expand transversely outward, thereby defining the substantially transverse expanded configuration.

6. The apparatus of claim 5, wherein the locator member comprises a control member having a distal end coupled to the second end of each spline, the control member being movable axially with respect to the elongate member to selectively expand the splines between the collapsed configuration and the expanded configuration.

7. The apparatus of claim 1, further comprising an actuator coupled to the locator member, the actuator configured for selectively expanding the positioning elements from the collapsed configuration to the expanded configuration.

8. The apparatus of claim 7, wherein the actuator is configured for selectively expanding the positioning elements to one of a plurality of expanded diameters.

9. The apparatus of claim 7, wherein the actuator is configured for selectively expanding the positioning elements to a desired angle with respect to a longitudinal axis of the locator member.

10. The apparatus of claim 9, wherein opposing positioning elements may be expanded to complementary angles with respect to the longitudinal axis.

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11. The apparatus of claim 1, further comprising a housing slidably disposed on an exterior of the elongate member, the housing configured for releasably holding the closure element, the housing being actuable for advancing the closure element distally towards the distal end of the elongate member for deploying the closure element.

12. The apparatus of claim 11, wherein the closure element comprises a clip deliverable from the elongate member, the clip configured for engaging tissue adjacent the opening.

13. The apparatus of claim 11, further comprising an actuator coupled to the housing, the actuator configured for advancing the housing distally to deploy the closure element therefrom.

14. The apparatus of claim 13, wherein the actuator is further configured for automatically collapsing the positioning elements to the collapsed configuration upon advancement of the housing.

15. The apparatus of claim 13, further comprising a spring mechanism for biasing the housing distally upon activation of the actuator.

16. The apparatus of claim 1, wherein the elongate member comprises an introducer sheath including a lumen therethrough, and wherein the locator member is removably insertable into the lumen, the distal portion of the locator member having a size for

insertion through the lumen when the positioning members are in the collapsed configuration.

17. The apparatus of claim 16, wherein the sheath and the locator member include cooperating detents for substantially securing the locator member axially with respect to the sheath when the locator member is fully inserted into the sheath.

18. The apparatus of claim 16, wherein the locator member comprises a substantially rigid sleeve extending beyond the distal end of the sheath, the positioning elements being deployable axially from within the sleeve.

19. An apparatus for delivering a closure element into a passage communicating with an opening into a body lumen, comprising:

an elongate member comprising proximal and distal ends;

a housing slidably coupled to the elongate member, the housing configured for releasably holding a closure device;

a locator member coupled to the elongate member, the locator member having a distal portion extending distally beyond the

distal end of the sheath when the locator member is fully inserted therein; and

one or more positioning elements on the distal portion of the locator member, the positioning elements being selectively expandable between a substantially axial collapsed configuration and a substantially transverse expanded configuration.

20. The apparatus of claim 19, wherein the elongate member and the locator member include cooperating detents for substantially securing the locator member axially with respect to the elongate member.

21. The apparatus of claim 19, further comprising an actuator coupled to the housing, the actuator configured for advancing the housing distally to deploy a closure element therefrom.

22. The apparatus of claim 21, wherein the actuator is further configured for automatically collapsing the positioning elements to the collapsed configuration upon advancement of the housing.

23. The apparatus of claim 21, further comprising a spring mechanism for biasing the housing distally upon activation of the actuator.

24. The apparatus of claim 19, wherein each positioning element comprises a spline having a first fixed end and a second movable end, the second end being axially movable towards the first end to cause an intermediate region of the spline to expand transversely outward, thereby defining the substantially transverse expanded configuration.

25. The apparatus of claim 19, further comprising an actuator coupled to the locator member, the actuator configured for selectively expanding the positioning elements from the collapsed configuration to the expanded configuration.

26. The apparatus of claim 25, wherein the actuator is configured for selectively expanding the positioning elements to one of a plurality of expanded diameters.

27. The apparatus of claim 19, wherein the elongate member comprises an introducer sheath, and wherein the locator member is insertable into a lumen of the sheath.

28. A method for delivering a closure element into a passage communicating with an opening in a wall of a body lumen, the method comprising:

positioning an elongate member through a patient's skin towards the body lumen via the passage, the elongate member including a lumen extending between its proximal and distal ends; and

coupling a locator to the elongate member until a distal portion of the locator extends beyond the distal end of the elongate member and into the body lumen;

expanding one or more positioning elements on the distal portion of the locator from a collapsed configuration to an expanded configuration;

manipulating the elongate member and locator from the body lumen until the positioning elements in their expanded configuration contact the wall of the body lumen, thereby providing a tactile indication of a location of the distal end of the elongate member; and

delivering a closure element via the elongate member into the passage.

29. The method of claim 28, further comprising withdrawing the elongate member and locator from the body lumen and opening, leaving the closure element to substantially close the opening.

30. The method of claim 28, wherein the elongate member comprises an introducer sheath, and wherein the method further comprises introducing one or instruments through the lumen of the sheath into the body lumen.

31. The method of claim 30, further comprising performing a diagnostic or therapeutic procedure using the one or more instruments at a location accessed via the body lumen.

32. The method of claim 31, wherein the body lumen comprises a blood vessel, and wherein the procedure comprises at least one of angioplasty, atherectomy, stent delivery, delivery of a therapeutic agent, and tissue ablation.

33. The method of claim 28, wherein the elongate member comprises a tubular body into which the locator is inserted, and wherein the locator is axially fixed with respect to the tubular body when the locator is fully inserted into the tubular body.

34. The method of claim 28, wherein the step of delivering a closure device comprises advancing a housing distally along an exterior of the elongate member, the housing having the closure device detachably held thereto.

35. The method of claim 34, wherein the housing is movable between a proximal position and a distal position, the distal position being a predetermined distance from the positioning elements in their expanded configuration.

36. The method of claim 35, wherein the positioning elements automatically return to the collapsed configuration when the housing is advanced to the distal position.

37. The method of claim 28, further comprising collapsing the one or more positioning elements to the collapsed configuration before withdrawing the elongate member and locator.

38. The method of claim 28, wherein the manipulating step comprises at least partially withdrawing the elongate member and locator from within the body lumen.

39. The method of claim 28, wherein the one or more positioning elements comprise a pair of opposing splines on the distal portion, the splines being expandable from a substantially axial collapsed configuration to a substantially transverse expanded configuration.

40. An apparatus for delivering a closure device, comprising:

an annular housing comprising a cavity, the housing comprising a hole therethrough defining a longitudinal axis;

a closure element disposed within the cavity;

an actuator coupled to the housing, the actuator comprising a control wire for moving the housing along the longitudinal axis away from the actuator.

41. The apparatus of claim 40, wherein the actuator comprises a connector for attached the actuator to an elongate member.

42. The apparatus of claim 41, further comprising an elongate member insertable into the hole in the housing, whereby the housing may slide along an exterior of the elongate member.

43. The apparatus of claim 42, wherein the elongate member comprises an introducer sheath.

44. The apparatus of claim 42, wherein the elongate member comprises a connector on one end for mating with the connector on the actuator.

45. The apparatus of claim 40, wherein the cavity is disposed within an end of the housing away from the actuator.

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